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The listing of claims will replace all prior versions, and listings, of claims in the

application:

**Listing of Claims:** 

1. (currently amended) A porous substrate comprising: a support; and an inorganic

porous region on a surface of said support, the inorganic porous region having a surface

capable of immobilizing probe molecules, the inorganic porous region having a tint and

exhibits exhibiting a reduced level of auto-fluorescence of at least about 15% relative to a

comparable non-tinted porous substrate surface, wherein said tint comprises at least one

of Co<sub>3</sub>O<sub>4</sub> or and NiO, alone or in combination.

2. (currently amended) The porous substrate according to claim 1, wherein said porous

region having a tint that reduces said relative auto-fluorescence levels by at least about

20% over said non-tinted porous substrate surface.

3. (currently amended) The porous substrate according to claim 2, wherein said porous

region having a tint that reduces said relative auto-fluorescence levels by at least about

50% over said non-tinted porous substrate surface.

4. (cancelled)

5. (original) The porous substrate according to claim 1, wherein said reduction in auto-

fluorescence is over a wavelength range from about 400 nm to about 720 nm.

6. (cancelled)

7. (currently amended) The porous substrate according to claim 1, wherein said tinted

porous region has a colorant component including further comprises a transition metal

ion.

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8. (currently amended) The porous substrate according to claim 1, wherein <u>said inorganic</u> porous <u>region substrate</u> consists essentially of:

Oxide	wt. %
$SiO_2$	53-67
$Al_2O_3$	3-10
$B_2O_3$	12-24
K <sub>2</sub> O	0-5
MgO	0-2
CaO	0.5-3
SrO	0-3
BaO	2-7
$Sb_2O_3$	0-2

and said tint includes at least one of Co<sub>3</sub>O<sub>4</sub> and NiO in the following weight percent:

Co <sub>3</sub> O <sub>4</sub>	0.1-9
NiO	0.1-10

## 9. (cancelled)

10. (currently amended) The porous substrate according to claim 1, wherein said inorganic porous region has a composition consisting essentially of:

Oxide	wt. %
$SiO_2$	55-65
$Al_2O_3$	4-9
$B_2O_3$	14-21
$K_2O$	1-5
MgO	0.1-2
CaO	1-2.5
SrO	0.5-1.75
BaO	3-5
$Sb_2O_3$	0-2
$R_xO_y$	0-2

and said tint including includes at least one of Co<sub>3</sub>O<sub>4</sub> and NiO in the following weight percent:

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wherein R is a transition metal selected from the group consisting of Fe, V, and Cu, and x and y are each  $\geq 0$ .

- 11. (currently amended) The porous substrate according to claim 8, wherein said glass composition has a coefficient of thermal expansion (CTE) of between about 35-44 x  $10^{-7}$ /°C.
- 12. (currently amended) The porous substrate according to claim 11, wherein said glass composition has a CTE of about  $38-40 \times 10^{-7}$ /°C.
- 13. (previously presented) The porous substrate according to claim 1, wherein said tinted region has an average auto-fluorescence background for Cy3 and Cy5 channels of up to about 50% RFU of said un-tinted porous substrate.
- 14. (previously presented) The porous substrate according to claim 1, wherein a number of biological or chemical probes are attached at defined locations on or within said tinted porous layer.
- 15. (original) The porous substrate according to claim 13, wherein said defined locations of probes assume a microarray format of at least one microspot per cm<sup>2</sup>.
- 16. (original) The porous substrate according to claim 13, wherein said defined locations of probes assume a microarray format of at least 10 microspots per cm<sup>2</sup>.
- 17. (original) The porous substrate according to claim 1, wherein said probe molecules include at least one kind of species selected from the following: oligonucleotides, nucleotides, nucleosides, DNA, RNA, peptide nucleic acid (PNA), peptides, polypeptides, protein domains, proteins, fusion proteins, antibodies, protein-membranes, G-coupled protein receptors, gangliosides, lipids, lipid membranes, cells or cell membranes, cell-lysate, or protein-small molecule ligands.

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18. (currently amended) A tool for performing biological or chemical assays, the tool comprises a non-porous support; and an inorganic porous region on a surface of said support, the inorganic porous region having a surface capable of immobilizing probe molecules, the inorganic porous region having a tint and exhibits exhibiting a reduced level of auto-fluorescence of at least about 15% relative to a comparable non-tinted porous substrate surface, wherein said tint comprises at least one of Co<sub>3</sub>O<sub>4</sub> or and NiO<sub>5</sub> alone or in combination.

- 19. (currently amended) The tool according to claim 18, wherein said porous region having a tint that reduces <u>said</u> relative auto-fluorescence levels by at least about 20% over said non-tinted porous substrate surface.
- 20. (currently amended) The tool according to claim 18, wherein said tinted porous region has a colorant component including further comprises a transition metal ion.
- 21. (currently amended) The tool according to claim 18, wherein said inorganic porous region consists essentially of:

Oxide	wt. %
$SiO_2$	53-67
$Al_2O_3$	3-10
$B_2O_3$	12-24
$K_2O$	0-5
MgO	0-2
CaO	0.5-3
SrO	0-3
BaO	2-7
$\mathrm{Sb_2O_3}$	0-2
$R_xO_y$	0-10

and at least one of Co<sub>3</sub>O<sub>4</sub> and NiO in the following weight percent:

$Co_3O_4$	0.1-9
NiO	0.1-10

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wherein R is a transition metal, and x and y are each > 0.

- 22. (original) The tool according to claim 21, wherein said R is selected from the group consisting of Fe, V, and Cu.
- 23. (original) The tool according to claim 18, wherein said probe molecules are biological or chemical molecules, including at least one kind of the following: oligonucleotides, nucleotides, nucleosides, DNA, RNA, peptide nucleic acid (PNA), peptides, polypeptides, protein domains, proteins, fusion proteins, antibodies, gangliosides, membrane proteins, lipids, lipid membranes, cellular membranes, cell lysates, oligosaccharides, or polysaccharides, or lectins.
- 24. (previously presented) The porous substrate according to claim 1, said porous region further comprising pores having pore sizes of about 5 μm.
- 25. (previously presented) The tool according to claim 18, wherein said porous region has pore sizes between about  $0.5 \mu m$  to about  $1.0 \mu m$ .
- 26. (previously presented) The porous substrate according to claim 8, further comprising a transition metal R alone or in oxide composition  $R_xO_y$  wherein x and y are each > 0.
- 27. (new) The porous substrate according to claim 26, wherein said R is selected from the group consisting of Fe, V, and Cu.
- 28. (new) The porous substrate according to claim 1, wherein said inorganic porous region comprises a glass frit.
- 29. (new) The porous substrate according to claim 28, wherein said glass frit comprises, in weight percent, the following oxides:

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Oxide	wt. %
$SiO_2$	53-67
$Al_2O_3$	3-10
$B_2O_3$	12-24
$K_2O$	0-5
MgO	0-2
CaO	0.5-3
SrO	0-3
BaO	2-7
$Sb_2O_3$	0-2.

30. (new) The porous substrate according to claim 1, wherein said support comprises an aluminosilicate glass.